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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/985,890	11/06/2001	Hajime Tabata	0505-0912P	4543

2292 7590 12/22/2005

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EXAMINER
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PENDLETON, BRIAN T

ART UNIT	PAPER NUMBER
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2644

DATE MAILED: 12/22/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/985,890

Applicant(s)

TABATA ET AL.

Examiner

Brian T. Pendleton

Art Unit

2644

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 10/5/05.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-16 and 18-22 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 21 and 22 is/are allowed.
- 6) ☒ Claim(s) 1,5-13 and 18-20 is/are rejected.
- 7) ☒ Claim(s) 2-4 and 14-16 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 06 November 2001 is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## DETAILED ACTION

### *Claim Rejections - 35 USC § 103*

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 1, 5-13, and 18-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lazzeroni et al in view of Hicks, US Patent 5,926,925 and further in view of Slater. Lazzeroni discloses a clampless headset mounting assembly for attaching a communication device comprising a socket 14 mounted on a helmet, a socket 20 for detachably connecting to the socket 14, a connecting cable 18 and a communications unit 22. Lazzeroni does not disclose that the socket has a magnet side on the helmet and a magnet body side on the connecting cable. Hicks discloses a magnetic sock holder, which has a common field of endeavor – magnetic sockets, comprising a magnet side socket 12, a magnet body side socket 14, and annular rib 22. The benefit of the annular rib was to prevent undesirable separation of the magnet side and magnet body side sockets (see column 4 lines 38-54). Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to use the magnet configuration of Hicks in the apparatus of Lazzeroni and incorporate a magnet side socket on the helmet and a magnet body side on the connecting cable. The combination does not disclose that the communication unit does not transmit a large physiological sound. Slater discloses an autotracking microphone squelch for aircraft intercom systems comprising microphone 16, switch 14, audio detector 34 and timer 46. Column 3 lines 41-63 disclose that the system has the capability to prevent

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squelch falsing or transmitting the sound of noise. A physiological sound would have qualified as undesirable noise. Thus, it would have been obvious to one of ordinary skill in the art at the time of invention to combine the circuitry of Slater in the combination of Lazzeroni and Hicks for the purpose of improving the sound quality of the communication unit. Claims 1, 5, 8, 9, 19 and 20 are met. Per claim 6, it was obvious to high pass filter the signal, as those signals represented the vocal range used in voice operated communication systems. As to claim 7, the combination provides for a mute terminal in the form of switch 14. Regarding claims 10-12, Slater discloses a threshold which is adjusted according to environmental conditions, the threshold acting as the reference point where communication voices are heard or not transmitted. Per claim 13, it would have been obvious to one of ordinary skill in the art at the time of invention to select a five second delay for the purpose of ensuring that incoming audio from a microphone is speech and is not inadvertently cut off during pauses in speech. Regarding claim 18, Slater discloses a sensitivity switch 41 for adjusting the reference value for gating the voice signals. As one of ordinary skill in the art would have known, voice operated systems have three parameters – a signal level, delay time, and amplification level of the gated signal. Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to also provide operating switches for delay time and amplification level in order to provide flexibility to the system.

***Allowable Subject Matter***

Claims 2-4 and 14-16 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

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Claims 21 and 22 are allowed.

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brian T. Pendleton whose telephone number is (571) 272-7527.

The examiner can normally be reached on M-F 7-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vivian Chin can be reached on (571) 272-7848. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Brian T. Pendleton  
Primary Examiner  
Art Unit 2644



btp